

AN EMPIRICAL ANALYSIS OF PRIMARY TEACHER STANDARDS IN VIETNAM

Introduction

This article presents an account of the development of competency standards and profiles for primary teachers in Vietnam. The development project has taken more than four years and used a combination of consultative, actuarial, and item response modeling procedures to develop and validate a scale of teacher competence. In the overall project, more than 27,000 teachers have been assessed and over 1,000 assessors trained, a set of teacher professional requirements has become available, and a data management system has been tried for the Vietnamese government.

After reviewing the international literature on teacher standards and competencies in which this study of Vietnam teacher standards is grounded, this article reports on the findings from an initial study in which 2,281 teachers were assessed in 10 provinces in Vietnam. The major aim of the study was to empirically validate and refine the standards for primary teachers in Vietnam as well as to determine the most appropriate way in which evidence could be gathered and scored for future roll-out.

Background

Economic development has created a demand for literate, trained populations, and its advance has aroused a consciousness in parents that their children must be literate and skilled if they are to enjoy some of the benefits of the increased wealth being generated (Shaw, 2004). Governments around the world have committed to a broader industrial base and are trying to address the issues arising from the resultant demand for a literate and highly trained population. In line with the declarations of the UNESCO/UNICEF conference in DAKAR 2000, there has emerged an imperative for “education for all” (EFA) and the implementation of universal education. The three goals of education established at the conference (i.e., equity, access, and quality) have been difficult to implement as coexisting properties of developing systems. Access for all has tended to be linked to differential quality, and equal opportunity and resourcing tends to be beyond developing economies.

As countries develop, they have been able to give more attention to the precise nature of their schools’ curriculum and to the quality of the teaching delivered in the realization of that curriculum. Pre-service training programs have been progressively extended in duration. Inspection and reporting systems have been established for assessing the capability and performance of practicing teachers, in part to identify areas where further, in-service training is required, but also to identify those teachers most able to take on supervisory or leadership responsibilities.

However, the sheer size of the required teaching “force” and public costs associated with its provision have remained important factors throughout this development. Increasingly, attention has focused on how

the quality of pre-service and in-service teacher training as well as teachers' in-school performance might be improved. From time to time, even in countries with mature economies and fully developed systems of universal schooling, moments of heightened concern have arisen about the overall costs of schooling. The systems have been challenged to do better with the resources they have. Ideas have been explored and strategies sought to provide a more clearly directed application of the resources and energies dedicated to teacher training and improvement. Governments, education administrators, school leaders, and teachers have looked for ways that teacher development might be more explicitly "tracked" so that those responsible for it could plan and map its progress and teachers could more readily demonstrate their attainment of knowledge, skill, and other aspects of capability.

Increasingly, governments are moving from an input mode of financing education to emphasize throughput or process, and output or outcomes. However, an outcome focus still tends to emphasize student achievement rather than the end result of schooling and lifelong learning. As part of the throughput or process approach, teacher qualifications and competencies are increasingly being examined and measured. Minimal threshold levels of standards are being established, and teachers are increasingly being expected to demonstrate these levels. Professional development of teachers is central to the reforms in the U.K., the U.S., and Australia, for instance, and governments are shifting their funding base from one of inputs required, to one based on the demonstration of improved performance and competencies. This, in turn, shifts to the notion of improved performance of teachers being linked to improved performance of students. The implications are that student learning will become a central theme of funding models linked to improved teacher and teaching competencies. Outcomes defined solely in terms of student performance are seen to be flawed.

Most notably, the development of competency standards for primary teachers in Vietnam has been a first in the development of teacher standards. While the format of the Vietnam standards is similar to those used in the United Kingdom, their content is quite different. Moreover, while the record system is similar to that of those reported in the Denver Public Schools (2005) system, this study has illustrated how it is feasible to develop the standards empirically.

The Knowledge Base of and Competency-Based Schemes for Teaching

Attempts to define, organize, and adequately describe the knowledge base of teaching have been numerous. Shulman (1987) described a framework that has become something of a benchmark in the ongoing quest for a set of appropriate categories. It can be summarized as follows:

- Content knowledge
- General pedagogical knowledge including principles and strategies for classroom management and organization

- Curriculum knowledge including materials and programs used as the “tools of trade”
- Pedagogical content knowledge—an amalgamation of content and pedagogy that is a teacher’s special form of professional understanding
- Knowledge of the learners and their characteristics
- Knowledge of educational contexts, including the characteristics of classrooms, schools, communities, and cultures
- Knowledge of educational ends, purposes, and values, and their philosophical and historical grounds

Delineation of categories within the knowledge base is seen as a starting point for building a broad and comprehensive competency-based scheme. It not only disaggregates the body of knowledge that teachers possess and build up in the progression from trainee to experienced practitioner, but it identifies the information and understandings that teachers draw upon when they engage in the many strategic thinking processes and actions that their practice requires.

In more recent applications of competency-based ideas to teaching, the construction of schemes for planning and assessing teacher development begins with comprehensive developmental maps of the knowledge, understandings, and appreciations considered by a range of stakeholders to be necessary for successful teaching performance (Griffin, Poynter, Nguyen, Ry, & Nguyen, 2001). These maps identify the required capacities for action and skills that flow from stakeholders’ interpretation or “reading” of teaching tasks and that transform aspects of knowledge into teaching action. In addition, schemes may identify values and commitments that a teacher must have or take up, and they may also include developing capabilities that a teacher is expected to build with experience.

Broad areas of qualities such as these (knowledge/understandings/appreciations; capacities and skills; values and commitments; developing capabilities) provide a more elaborate framework of strands or domains for a scheme. Within a strand (for example: pedagogical knowledge and skills), a number of descriptors or statements is used to detail the qualities or competencies that make up the strand (for example: capacity to develop positive attitudes toward learning; skill in providing opportunities for cooperative learning, etc.).

International Competency-Based Schemes of Teaching Standards

Teaching standards are necessarily culturally-based. This can be seen by investigating developments in the United States, the United Kingdom, and Australia where the purpose and accountability links of teacher standards differ (see Table 1).

Table 1

Comparison of Teaching Standards by Key Characteristics in Different Contexts

Key characteristics	U.S.		Australia	United Kingdom	
	Denver Public Schools (2005)	Danielson's Framework for Teaching (1996)	Australian Teaching Council (1996)	Teacher Training Agency (1996)	Scottish Office Education Dept (1993)
Instruction	Instruction	Instructional planning			
Assessment	Assessment		Monitoring and assessing student progress and learning outcomes	Monitoring, assessing, recording, and accountability	
Planning	Curriculum and planning		Planning and managing the teaching and learning processes		
Environment	Learning environment				School-related competencies
Professionalism	Professional responsibilities	Professional responsibilities (ideology and philosophy)	Using and developing professional knowledge and values		Attitudes and commitments
Pedagogy		Instructional interactions (pedagogy)			
Classroom management		Classroom management		Planning, teaching, and classroom management	Classroom (communication, methodology, classroom management, and assessment)
Content knowledge				Subject knowledge and understanding	Subject and the content of teaching
Reflection			Reflecting, evaluating, and planning for continuous improvement		

It can be seen in Table 1 that, while there are a number of common characteristics across a number of international standards, such as assessment- and professionalism-related competencies, there does not appear to be a single set of universal standards that is common across these three locations. It is no surprise, therefore, when developing standards for teachers in Vietnam, that the culture and government goals and directions influenced the development of standards and requirements for teachers.

In 1994, the Organization for Economic Cooperation and Development (OECD) published its survey of teacher quality in its member states. It concentrated on the characteristics of high quality teachers in relation to:

- Knowledge of substantive curriculum areas and content
- Pedagogical skill including the acquisition of knowledge and ability to use a repertoire of teaching strategies
- Reflection and the ability to be self-critical
- Empathy and commitment to the acknowledgment of the dignity of others
- Managerial competence in a range of responsibilities within and outside the classroom (OECD, 1994)

This work was notable because of the characteristics it identified. The succinct statements illustrate the advantage of building up concepts from studies of highly successful practice. Observing that teacher commitment was the quality that made all other qualities possible, the report noted that high quality teachers:

- demonstrate commitment
- have subject specific knowledge and know their craft
- love children
- set an example of moral conduct
- manage groups effectively
- incorporate new technology
- master multiple models of teaching and learning
- adjust and improvise their practice
- know their students as individuals
- exchange ideas with other teachers
- reflect on their practice
- collaborate with other teachers
- advance the profession of teaching
- contribute to society at large

More than any other analysis, this set of expectations has influenced the work in Vietnam through the World Bank education sector report (World Bank, 1996).

Moreover, the establishment of standards and their implementation should be based on a number of principles, such as those articulated by Brock (2000):

- The identification of any professional standards must involve full discussion with and ultimately ownership of such standards by the teaching profession.
- Accomplished teachers make a difference (in pupil performance).
- Any attempt to establish professional teacher standards must be firmly grounded in accurate and comprehensive understanding of both the timeless and the evolving nature of the work of teachers, principals, and other school leaders.
- Any construction of professional standards should facilitate the concept of a career-long continuum from probationary teacher to retirement—with the possibility of moving within as well as outside of and returning to the profession, and being applicable to all ranks across the spectrum from beginning or newly appointed to experienced teachers, principals, and school leaders.
- The articulation and commitment to professional standards must be flexible enough to enable, indeed celebrate, the quality of individuality, which is a hallmark of being a professional.

As such, a standards framework needs to acknowledge that an accomplished teacher likes children, likes working with them, and has high expectations. Teachers need to have appropriate intellectual mastery of the subjects and be able to keep abreast of evolving knowledge and teaching methods. They need to be reflective learners themselves and continually attempt to increase their knowledge and practice expertise. The standards must also acknowledge that knowledge, understanding, and practices are interdependent and that individual competencies interact.

Glaser (1987) and Berliner (1999) provided insights into who can be considered expert teachers. Expert teachers excel mainly in their own domain and in particular contexts. They develop automaticity for repetitive operations that are needed to accomplish their goals. Expert teachers are more opportunistic and flexible in their teaching than are novices. They are more sensitive to the task demands and social situations surrounding them when solving problems. Expert teachers can represent problems in qualitatively different ways than do novices, have faster and more accurate pattern recognition capabilities, perceive more meaningful patterns in the domain in which they are experienced, and solve problems more slowly, but bring richer and more personal resources of information to bear on the problems they are trying to solve. They have extensive pedagogical knowledge, including deep representations of subject matter knowledge, and can make better use of it. They have better problem solving strategies, are better at adapting and modifying goals for diverse learners, and have better skills for improvisation. They are better at decision

making, take on more challenging objectives, establish a better classroom climate, and have better perception of classroom events and abilities to read the cues from students. Expert teachers have a greater sensitivity to context. They are better at monitoring and providing feedback to students. They more frequently test hypotheses about teaching and learning, give greater respect to students, and display more passion for teaching. Their students have higher self-efficacy and motivation to learn, pursue deep learning activities, and have higher levels of achievement. Finally, expert teachers understand how to translate expertise in discipline to a form that is understood by pupils, and have greater knowledge of how their discipline(s) and pedagogy interact.

Teacher qualities and competencies change and grow through experience, and teachers adapt to the circumstances in which they find themselves at varying stages of their career. School authorities seek to recognize this or allocate additional responsibilities to selected experienced teachers, and schemes are often structured according to levels or stages. The capacity to adapt and demonstrate increasingly sophisticated competencies is expected to grow through successive levels.

Indicators that describe ways in which teachers can demonstrate evidence of those qualities in their work are often needed. Indicators assist teachers to monitor their own development and provide an idea of what is expected at particular levels. They also assist those who are responsible for supporting or assessing teachers in their development. Monitoring and assessment of a teacher's development also need to take account of the context within which the teacher works and the quality with which the teacher demonstrates or adapts performance to the demands of the context. Ideally, an assessment would occur across the range of competencies and would be qualified according to how well the teacher performed specific duties and adapted to the context. Stages of development of a teacher's competence could then be identified and a profile drawn up to assist the teacher and those responsible for her/his development to plan for improvement. This is not the same as adjusting an assessment for the effect of context.

Developing Primary School Teacher Standards in Vietnam

The background studies discussed above were taken into account in the development of the prototype primary teacher standards for Vietnam in 2000. It was decided that Vietnam should have a standards- or competency-based approach in which the focus is on what teachers were required to know or do in the school rather than on time served. This represented a radical shift in thinking and needed a long gestation period for the government to publicize it and gain its acceptance by the teaching profession and the community. A national program through the media was launched to gain this acceptance.

A period of two years elapsed after the initial feasibility study (Griffin et al., 2001) before the competency approach was further explored. After reviewing the international scene in standards and teacher evaluation, a committee established by the Ministry of Education and Training (MoET)

set the parameters for the development of standards and for profiling teacher development. For example, the number of levels was set by the government working party after a series of consultations and functional analyzes of teachers' duties according to the government regulations. The number of levels was set to accommodate the government regulation that defined the ranks of teachers as "Teacher," "Senior Teacher," and "Leading Teacher." The study reported here sought to develop a set of professional standards for defining the skills and knowledge required of teaching at each of these levels in Vietnam. There were three main purposes of the procedure developed for this study. They were:

1. To empirically validate and refine the standards
2. To identify efficient and standardized scoring procedures for making professional judgments on the competence level of the teacher
3. To determine the most appropriate way to gather evidence of teacher competence in school settings

The Methodology

Background Development Work on Defining the Standards

The construction of the standards was based on a combination of both theoretical and psychometric approaches to scale development. The MoET initially developed a set of prototype standards in which three 'strands' or domains of competence were identified, each having three levels. The prototype standards contained no procedural advice; they were simply broad statements and description of levels of development among teachers. A series of forums with key stakeholder groups (including academics, government officials, teacher education providers) were used to review the standards and to make recommendations about procedures to ensure that the assessment process matched the existing procedure as closely as possible but allowed for change in expectations to be introduced.

At the end of the drafting process, three competence strands were agreed upon: ideology and philosophy, discipline knowledge, and pedagogy (see Figure 1). Specific requirements (competencies) were agreed upon for each strand. These were defined as the professional expectations of teachers. There were four requirements in the ideology strand and five requirements for each of the pedagogy and knowledge strands. Each requirement was defined by a series of indicative behaviors, knowledge, or skills that the teacher was expected to be able to exhibit. These were called performance indicators (PI). Each indicative behavior (PI) was then further refined according to the quality of the behavior, knowledge, or skill exhibited. These were called quality criteria (QC) and they essentially answered the question of 'how well' was the indicative behavior demonstrated such that it was possible to differentiate among teachers, based on evidence produced.

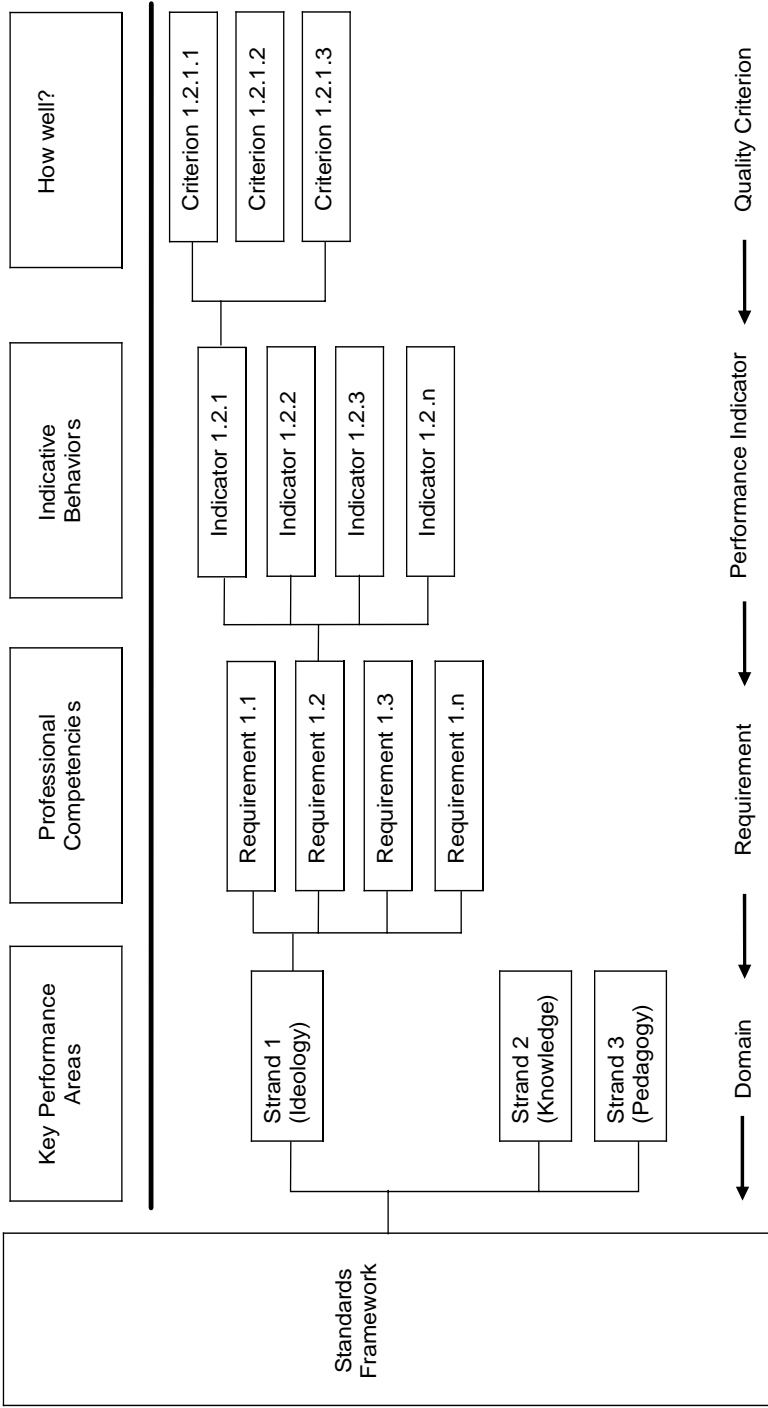


Figure 1. The layered structure of the standards illustrating the relationship among strands, requirements, indicators, and criteria.

The layered or nested structure of the standards enables four issues to be addressed:

1. What is expected of teachers? (requirement)
2. What evidence would a teacher have to demonstrate to indicate that this was present? (performance indicator)
3. How well did the teacher demonstrate this? (quality criterion)
4. How do the quality criteria differentiate among teachers?

The first three questions listed above addressed the overall definitions of teacher requirements. The fourth question was treated as an empirical question, and was subject to a survey of teachers and an investigation of the efficacy of the assessment procedures developed in parallel to the standards. The content and substance of the requirements and the assessment procedures were subjected to a series of reviews and examinations including a series of expert review panels and a pilot study to examine the proposed assessment procedures and their potential impact on the teachers. The feedback from the panel and pilot studies was used for a final revision before trials began.

Assessment Procedures

Teacher Training Institute (TTI) staff, district officers, and leading teachers filled the role of assessors. They were selected by the MoET and hence were assumed to have high levels of teacher competence as well as honorable status in the community. Eleven assessors were selected from each of the ten (of a total of 61) provinces that were selected by the government to participate in the study reported here. They were also trained to become “assessor trainers” for later scaling-up of the procedure. This would enable continuous training of assessors to occur for a future roll-out in which over 300,000 teachers are expected eventually to be assessed.

Assessors were trained in the procedures and the interpretation of evidence obtained using portfolio, interview, third-party reports, and direct observation. Each assessor conducted approximately 22 assessments yielding a total of 2,181 teachers assessed.

Data were forwarded to the central project office. A data checking exercise was performed to ensure that there were no incorrect or inappropriate codes in the data and to check the data for accuracy and reasonableness. The data were then analyzed using item response modeling procedures involving ConQuest (Wu, Adams, & Wilson, 1998).

Recording Instruments

The assessors were required to complete a questionnaire on both the teacher’s performance level as well as the sources of evidence (i.e., portfolio, interview, classroom observation, and third party). The assessor recorded the numerical code for the quality criterion that best described the teacher’s performance. The requirements, performance indicators, and

quality criteria were presented in a rating scale format. A sample item is shown in Table 2.

Table 2

Sample Item From Pedagogy Strand of Teacher Questionnaire

Requirement 3.1: Knows how to design lesson plans, which is reflected by identifying the right objectives, content of the lessons, intended teaching methods and aids, and appropriate allocation of time according to lesson procedures.		
Performance indicator (PI)	Quality criteria (QC)	Rating
3.1.2: Lesson plans must sufficiently present objectives of the lessons.	3.1.2.1 Lesson plans must be developed in accordance with objectives of the lessons	1
	3.1.2.2 Lesson plans must sufficiently present objectives of the lesson regarding knowledge, skill, and attitude	2
	3.1.2.3 Lesson plans must present objectives of the lesson in a sufficiently detailed manner for observation and evaluation	3
	Not enough information to make a decision	0

As shown in Table 2, a hierarchical rating scale was used to record the teacher's performance. The number of levels varied, depending on the nature of the indicator. A zero was used if the assessor could not identify any evidence of the criterion.

The Sample

The sample of teachers was selected from ten provinces in Vietnam. The distribution of these teachers across provinces is shown in Table 3.

Table 3

The Number of Teachers Assessed in Each of the Ten Provinces

Province	Number of teachers assessed
Hai Phong	221
Ninh Binh	220
Vinh Phuc	220
Son La	219
Quang Binh	210
Phu Yen	220
Kon Tum	220
Ho Chi Minh	214
Binh Phouc	216
Ben Tre	221
Total	2,181

Results

Calibration of the Requirements

The criteria data codes associated with each requirement were treated as separate scales and each of the 14 requirements was separately calibrated. These analyzes were supplemented by an interpretation following a procedure outlined previously (Griffin, 2004) where groups of criteria, for which the levels of difficulty for teachers to demonstrate were similar, were interpreted. The process is similar to that used in interpreting a factor analysis, but this procedure yielded a series of ordered developmental levels of teacher competence for each requirement.

An example of the process used to calibrate requirements is shown in Table 4. This example depicts the QC for the PIs for the designing-lessons requirement of the pedagogy strand.

Table 4

Performance Indicators and Quality Criteria of the Designing-Lessons Requirement

Requirement 3.1: Knows how to design lesson plans, which is reflected by identifying the right objectives, contents of the lessons, intended teaching methods and aids, and appropriate allocation of time according to lesson procedures.	
Performance indicator (PI)	Quality criteria (CQ)
3.1.1 Designs lesson plans in accordance with regulations on the structure.	3.1.1.1 Designs the lesson plans in accordance with components of the structure
	3.1.1.2 Designs the lesson plans with all components of the structure
3.1.2 Lesson plans must sufficiently present objectives of the lessons.	3.1.2.1 Lesson plans must be developed in accordance with objectives of the lessons
	3.1.2.2 Lesson plans must sufficiently present objectives of the lesson regarding knowledge, skill, and attitude
	3.1.2.3 Lesson plans must present objectives of the lesson in a sufficiently detailed manner for observation and evaluation
3.1.3 Lesson plans are consistent to the major content of the lesson.	3.1.3.1 Presents correctly the major content and knowledge of the lesson
	3.1.3.2 Lesson plans must sufficiently and correctly present the content of the lesson
	3.1.3.3 Lesson plans must sufficiently and correctly present the core content of the lesson

(continued)

Table 4 (*continued*)

Performance indicator (PI)	Quality criteria (QC)
3.1.4 Lesson plans present a selection of teaching methods to facilitate pupils' learning initiative.	3.1.4.1 Lesson plans must use the learning methods within the teaching guides
	3.1.4.2 Lesson plans must evince selection and modification of teaching methods within teaching guides so as to cater to the background characteristics of the pupils
	3.1.4.3 Lesson plans must evince innovation of teaching methods to facilitate pupils' learning initiative
	3.1.4.4 Lesson plans must evince innovation of teaching methods to guide and facilitate pupils' self-learning methods
3.1.5 Learning materials, aids, and resources are selected and used effectively to improve teaching quality.	3.1.5.1 Uses learning materials and aids that are specified in the teaching plans and guides developed by the Ministry
	3.1.5.2 Selects and seeks additional support materials to assist with gaining a deeper and broader knowledge and understanding of the curriculum area
	3.1.5.3 Identifies, evaluates, and selects learning materials, aids, and resources in line with the documented learning goals, pupil characteristics, learning environment, and budget, time, and other constraints
	3.1.5.4 Considers individual learning differences in the development, selection, and adaptation of learning materials and resources, and can justify selection for all pupils
3.1.6 Assessment methods are included in lesson plans.	3.1.6.1 Assessment methods are in accordance with the teaching guides
	3.1.6.2 Lesson plans demonstrate flexibility in applying assessment methods
	3.1.6.3 Lesson plans demonstrate creativity and innovation in methods to assess pupils' results
3.1.7 Lesson plans must present reasonably distributed timetable for teaching activities in the class.	3.1.7.1 Lesson plans demonstrate time allocated for teaching and learning activities
	3.1.7.2 Lesson plans demonstrate appropriate time allocation for teaching
	3.1.7.3 Lesson plans demonstrate flexible time allocation for teaching

As can be seen in Table 4, the first requirement in strand 3 (referred to as requirement 3.1 or the designing-lessons requirement) had seven performance indicators (PI). For each of these seven PIs, there was a series of quality criteria (QC). The number of quality criteria varied across PIs. For instance, PI 3.1.1 has only two QC levels, while PI 3.1.5 had four.

Assessors scored the teachers against each PI by selecting the QC level that most closely matched each teacher's performance. The seven PI and their associated QC codes were calibrated using the RASCH partial credit model. This juxtaposes the demands of the criteria with the estimates of the teachers' ability. They are presented in a figure called a variable map. Figure 2 shows a variable map resulting from the analysis of requirement 3. The distribution of 'Xs' on the left of the figure represents

the teachers and the height of the ‘X’ represents the teacher’s ability estimate on requirement 3. The code for each indicator is represented at the bottom of the figure using the three-digit code (e.g., 3.1.1 refers to strand 3, requirement 1, PI 1, and 3.1.2 refers to strand 3, requirement 1, PI 2, etc.). In this example, performance indicator 3.1.5 required the most teacher ability, while a score of 1 on performance indicator 3.1.2 required the least teacher competence.

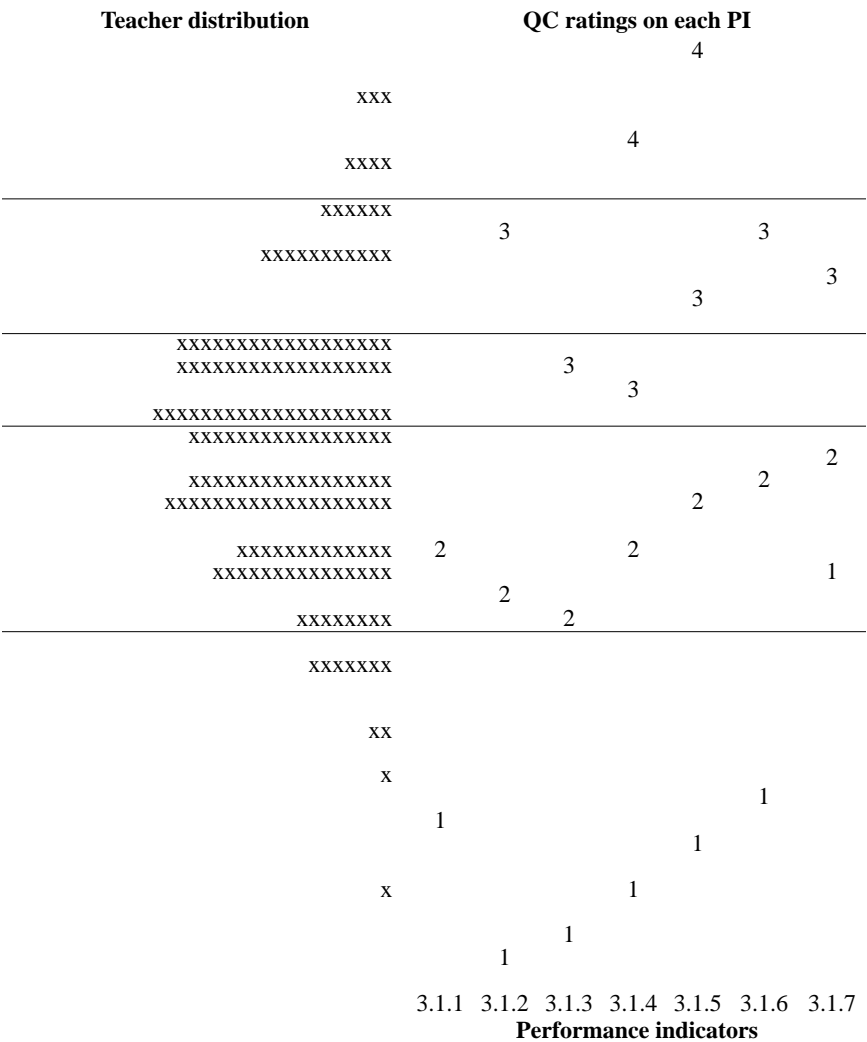


Figure 2. Variable map of requirement 3.1. Each X represents 10 teachers.

The height of the QC code represents the difficulty experienced in demonstrating that specific quality of performance. The QCs can be

grouped into five clusters as indicated by the horizontal lines. Once the levels were identified in the variable map, a content analysis of the QCs within each cluster provided an interpretation of the developmental levels within the requirement.

In Table 5, the first column refers to the *item code*, which represents a QC on a PI for that requirement. The column titled *quality criterion* (QC) presents the statement that matches the item code and is taken directly from the assessment questionnaire. The column titled *requirement level descriptor* represents the interpretation of the common set of skills and knowledge that underpinned that set or cluster of indicators (as represented in the variable map in Figure 2). In this example, requirement 3.1 could be explained adequately using five levels that correspond to these five clusters. A *nutshell* (or gist) statement is provided to summarize each of the five levels. This was done for convenience of recording later assessments, and these statements are recommended as the basic materials for the future assessment recording sheets when the data are analyzed at the strand level.

Table 5

Level Descriptors and Nutshell Statements for Requirement 3.1

Item code	Quality criteria (QC)	Requirement level descriptor	Nutshell statement
3.1.5.4	Consider individual learning differences in the development, selection, and adaptation of learning materials and resources, and justify selection for all pupils	Consider individual learning differences in the development, selection, and adaptation of learning materials and resources, and justify selection for all pupils. Select and implement appropriate learning strategies to facilitate pupils' self-learning	Level 5: Tailored and individualized approach to teaching and learning
3.1.4.4	Lesson plans demonstrate innovative teaching methods to guide and facilitate pupils' self-learning methods		
3.1.6.3	Lesson plans demonstrate creativity and innovation in methods to assess pupils' results	Develop lesson plans that demonstrate creativity, innovation, and flexibility in assessment and teaching practices. Select and use learning materials, aids, and resources consistent with documented learning objectives, and take into account the characteristics of pupils, learning environment, and budgetary/time factors	Level 4: Creative approach to teaching and material development
3.1.7.3	Lesson plans demonstrate flexible time allocation of teaching and learning activities that reflect situational constraints		
3.1.2.3	Lesson plans reflect objectives of the lesson in sufficient detail for observation and evaluation		
3.1.5.3	Identify, evaluate, and select learning materials, aids, and resources in line with the documented learning goals, pupil characteristics, learning environment, and budgetary/time constraints		

(continued)

Table 5 (*continued*)

Item code	Quality criteria QC	Requirement level descriptor	Nutshell statement
3.1.3.3	Lesson plans sufficiently and correctly present the focus of the lesson	Develop detailed lesson plans that outline lesson's focus, learning methods, assessment strategies, and time allocation. Select additional support materials to gain a deep and broad knowledge and understanding of the curriculum area.	Level 3: Develop lesson plans that cater to local context and children
3.1.4.3	Lesson plans evince innovative teaching methods to facilitate pupils' learning initiative		
3.1.7.2	Lesson plans demonstrate appropriate time allocation for teaching	Design lesson plans that outline all essential components such as learning objectives, content, teaching methods, and time allocation	Level 2: Attention to detail of lesson plans and objectives
3.1.6.2	Lesson plans demonstrate flexibility in applying assessment methods		
3.1.5.2	Select and seek additional support materials to assist with gaining a deeper and broader knowledge and understanding of the curriculum area		
3.1.1.2	Design the lesson plans with all components of the structure		
3.1.4.2	Lesson plans evince selection and modification of teaching methods within teaching guides to cater to the background characteristics of the pupils		
3.1.7.1	Lesson plans demonstrate time allocated for teaching and learning activities		
3.1.2.2	Lesson plans sufficiently reflect objectives of the lesson regarding knowledge, skill, and attitude		
3.1.3.2	Lesson plans sufficiently and correctly present the content of the lesson		
3.1.6.1	Assessment methods are in accordance with the teaching guides		
3.1.1.1	Design the lesson plans in accordance with components of the structure		
3.1.5.1	Use learning materials and aids that are specified in the teaching plans and guides developed by the Ministry	Attempt to develop, customize, or use lesson plans in accordance with teaching guides	Level 1: Use standard approach and teaching guides
3.1.4.1	Lesson plans are consistent with teaching guides		
3.1.3.1	Correctly present the major content of the lesson		
3.1.2.1	Lesson plans developed in accordance with objectives of the lessons		

While the sample was not a random sample and it is not intended to represent the distribution of competency among Vietnam teachers, it is instructive to examine the distribution of these teachers' competency levels. Figure 3 indicates that most teachers in the trial sample were assessed at level 3 on this requirement (54%). Very few teachers were assessed at the two extreme ends of the scale (less than 6% for both levels 1 and 5).

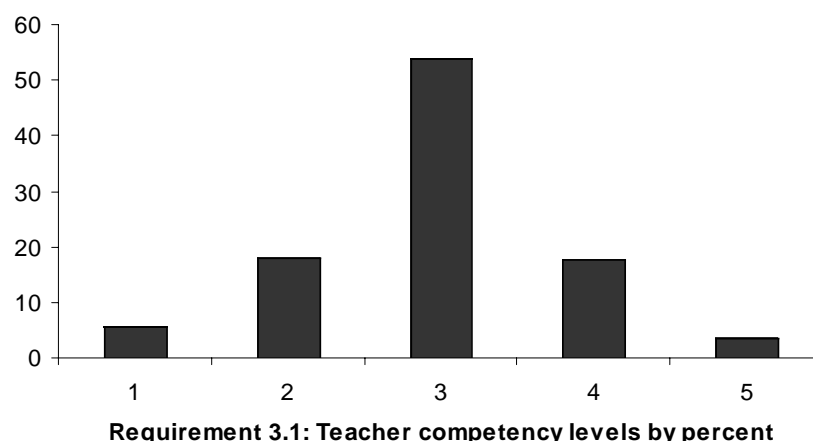


Figure 3. Proportion of teachers assessed at each level of requirement 3.1.

To simplify the procedures for recording and interpreting the assessments, a set of scoring rules also needed to be developed for each requirement. While holistic assessment was recommended, the MoET representatives were of the opinion that the appearance of scores and rules for conversion would be more acceptable to teachers and to assessors than an on-balance holistic judgment-based assessment.

Each requirement for all three strands was calibrated in a similar fashion and a series of 'nutshell' summary statements were derived for each requirement.

Strand Calibration

It was also possible to empirically describe the strands using the same analysis. In this step however, the rating scale consisted of the nutshell statements for each requirement. This meant that a simple assessment instrument could be developed representing the standards. Each requirement was treated as a separate item, and analyses were conducted for each strand. The layout of this analysis for the knowledge strand is shown in Table 6. Under these circumstances, a 14 item record sheet was needed to record the teacher performance.

Table 6

Requirement Calibration to Develop Assessment Instrument for Knowledge Strand

	Level 5	Level 4	Level 3	Level 2	Level 1
K1	5. Adaptable to subject and grade	4. Has special skills across years	3. Limits subject across years	2. Adapts subject but limits year level	1. Limited to specific year and subject
K2		4. Analytical and creative approaches to teaching	3. Evaluative and critical approach to teaching	2. Understands reasons for approaches to teaching	1. Basic knowledge of teaching
K3			3. Proponent of embedding political message	2. Party policies are part of teaching	1. Compliant to party policy, follower of policy
K4		4. Incorporates regulatory matters in teaching	3. Explains the value of state regulatory matters in school governance	2. Understands regulatory matters	1. Aware of state regulatory matters
K5		4. Critical use of community influence and materials	3. Incorporates local materials and influences in teaching	2. Discerning with regard to community influences	1. Aware of some community resources and influences

Analysis of the relative requirement levels and clusters in Figure 4 suggested that it might be appropriate to define four levels. A content analysis of the clusters of nutshell statements identified overall level descriptors for the strand. Moreover, to be consistent with the Vietnam Teacher Terms of Service, three levels were defined for each strand.

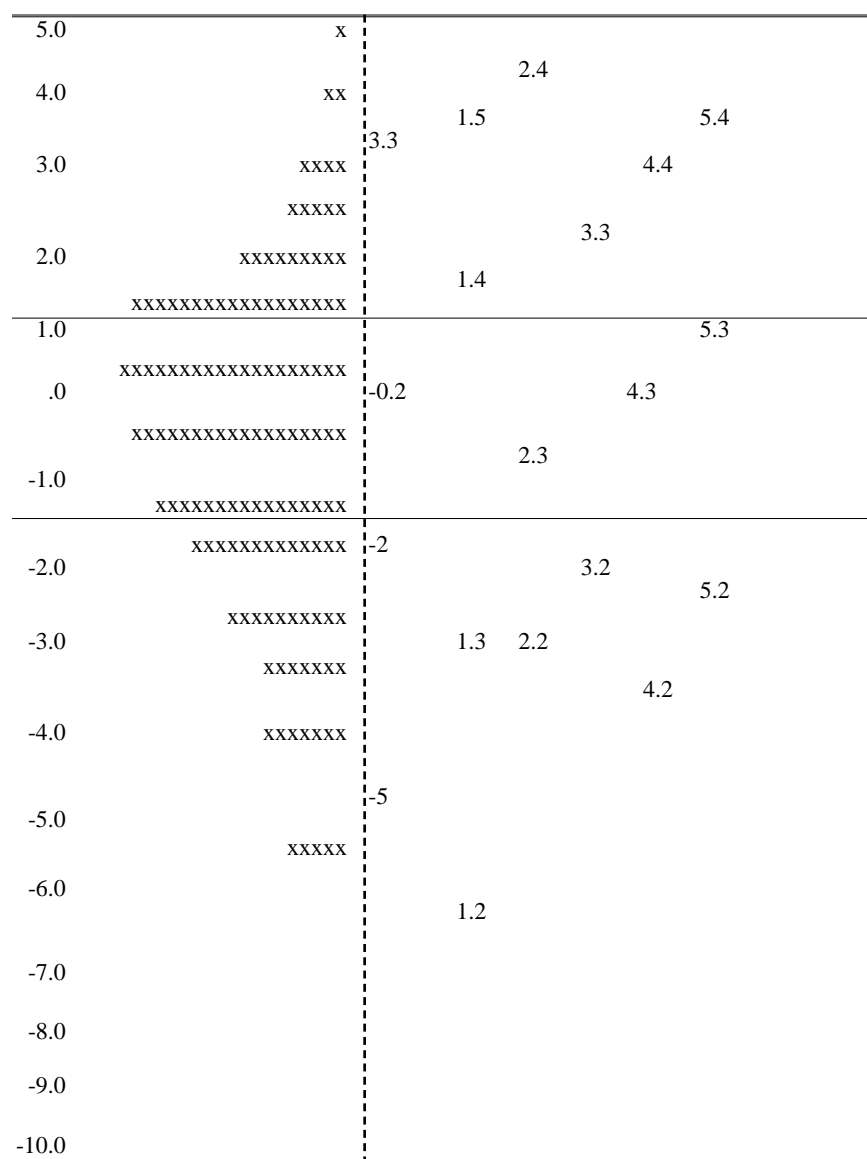


Figure 4. Variable map of the knowledge strand calibration. Each X represents 10 teachers.

Discussion and Conclusion

Reform in primary education in Vietnam has been an ambitious program. Reforms of curriculum, teaching and learning, resource and infrastructure were targeted in the World Bank strategy developed in conjunction with the Vietnamese government. Developing teacher standards

was identified as an important central aspect of their reform of the education system. This article has discussed the development of only one component of the reform of teaching and teaching standards. The overall reform was intended to include changes to teacher appraisal, their terms of service, opportunities for pre- and in-service teacher training, and a personnel management system. The assessment procedures developed and reported in this study were meant to be central to the overall reform. Links between the assessment outcomes and professional development opportunities were also meant to have been established coincidentally. A three-tier progression for advancement in teaching was expected to be established as a framework for teacher promotion. Teachers would and could advance to the top of the first tier (beginning teacher) based on time served, but if a teacher sought promotion to “advanced teacher,” an assessment of competence would be required indicating that the teacher has at least met the standards for that second level. The teacher could then progress to the top of this second tier and when ready for promotion to the level of “expert teacher,” another assessment would be required.

At the time of this writing the other components of the primary teacher reform had not been realized to a point where the assessment could point to professional development programs needed to raise performance from one tier to the next. Nor has the management system been finalized, nor the terms of service that would define the regulations for such a system to be implemented. The fifth component of the system, capacity building, had in part been successful, at least for the assessment component, in that the local team has been trained in the methods of developing standards, and in the assessment strategies. More than 1,000 assessors have been trained, and technical teams have been trained in the three regions surrounding Hanoi, DaNang, and Ho Chi Minh City. In this way, an infrastructure has been put in place for the system to be rolled out as the remaining components emerge.

In this component of the reform, item response modeling was used to develop a simple-to-use questionnaire format for recording teacher competence against a range of standard requirements. The results showed that assessors could be trained, and that the requirements and the criteria discriminated among teachers on the basis of their professional competence. Assessors found the system usable and the training program was readily adapted to local Vietnamese conditions and educational culture. It was clear, however, that teaching and classroom practices and cultures were not amenable to Western cultural competencies. What was regarded as superior teaching and classroom management was not equivalent with perceptions informing Western approaches, but it was not the purpose of the study to impose the latter. Thus, despite the similarity in structure to standards developed elsewhere, the content and orientation of the Vietnamese standards are more fitting to the culture of the existing system. In contrast, the layered structure of the standards and the methodology employed to arrive at them were clearly transportable from a Western system to the Vietnamese Confucian context.

While the nomenclature varied to suit the language and expecta-

tions of the Vietnamese government, the structure remained stable. Strands (domains) were broken down into requirements (competencies), which in turn required a checklist of evidence (performance indicators), and these in turn were qualified according to the quality of the performance embodied in the evidence (quality criteria). It was clear that professional standards could be developed for Vietnamese primary schools as much as they could be used in other fields such as emergency management, senior secondary schools, and even for school principals.

The Vietnamese education system had several requirements of its own. It was clear that assessors had to be trained and credentialed to collate evidence from a range of sources before completing the assessment record forms. It was also necessary to train the assessors to prepare the assessment materials and procedure in advance of each visit to a school so that the time spent on any individual teacher assessment in the school was minimized. The expense, in terms of teacher and assessor time, needed to be minimized. A time limit was placed on the assessment and a single form used to record all assessment data. Assessors should calculate a score for each requirement and also record this on a yet-to-be designed Requirement Record Form.

All assessors also had to be competent with respect to the requirements. This meant that they would all be expected to undergo a training program and be assessed against the knowledge and skills involved in conducting assessments and providing advice to teachers about career enhancement and professional development. Both the assessor and teacher signed the completed record and recommendation sheet at the end of the assessment debriefing session. In the event of a dispute over the assessment, an appeals process was established by MoET so that all appeals could be heard at the district office. Procedures for this were being developed and documented in the Terms of Service. District and provincial officers were also able to review decision patterns of assessors on a regular basis and to identify assessors who required further training.

Most notably, this has been a first in the development of teacher standards. While the format of the standards is similar to those used in the United Kingdom, their content is quite different. Moreover, while the record system is similar to those reported in the Denver Public Schools (2005) system, this study has illustrated how it is feasible to develop the standards empirically with compatibility to cultural systems.

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Patrick Griffin is the Director of the Assessment Research Centre at the University of Melbourne, Parkville, Victoria, Australia.

Nguyen Thi Kim Cuc is a Research Fellow for the Assessment Research Centre at the University of Melbourne, Parkville, Victoria, Australia.

Shelley Gillis is a Research Fellow for the Assessment Research Centre at the University of Melbourne, Parkville, Victoria, Australia.

Mai Thi Thanh is a Senior Educational Specialist at the World Bank, Hanoi, Vietnam.